

## **Dr. Frederick M. Hueston: "Sustainability and Stone Restoration and Maintenance"**

Everywhere you look individuals, government agencies, universities and schools and even private businesses are going green. As we hear news about global warming and how we are polluting our own environment, it is of utmost importance that we all do our part in saving our planet not only for our present generation but for generations to following.

What Does Going Green Mean?

The term Green or Going Green has entered our vocabulary but few really know what the term means. Going Green is principles that minimize the use of nonrenewable resources and seek to prevent air, water and ground contamination and other activities that degrade the environment. According to The US Green Building Council, world wide buildings account for 17% of fresh water withdrawal, 25% Wood Harvest, 33% CO2 emissions and 40% material and energy use.

Going Green is simply changing the way we build, operate and maintain buildings to reduce the negative impact it is having on our environment.

Many small businesses feel that they are too small to make an impact on the environment. Even individuals feel the same. Take a look at the following facts and you will see this is simply not true.

- A single quart of motor oil, if disposed of improperly, can contaminate up to two million gallons of fresh water.
- A 1/32" leak in a faucet can waste up to 6,000 gallons of water a month, or 72,000 gallons a year.
- Americans throw away 25 billion Styrofoam coffee cups every year, and 2.5 million plastic beverage bottles every hour.
- The amount of wood and paper we throw away each year is enough to heat 50 million homes for 20 years.

And the list goes on and on.

### **Stone Restoration and Green**

Traditionally the restoration, repair and maintenance of stone and terrazzo surfaces use chemicals that are harmful to the environment and to people in general. Chemicals such as polishing compounds contain harmful acids. Solvent based cleaners and sealers emit harmful VOC's. Not to mention the carcinogens and toxic effects many of these

chemicals have on humans. The procedures used to restore stone surfaces also produce a copious amount of waste and use large amounts of fresh water.

Boylan Marble & Terrazzo Restoration Ltd. is the first stone restoration company to take steps to eliminate all these harmful chemicals and processes. Boylan Marble & Terrazzo Restoration Ltd. has developed methods to restore, repair and maintain stone surfaces using no harmful chemicals. As matter of fact the restoration and polishing of marble, granite, limestone and terrazzo uses no chemicals at all. Here is a summary of our process

The floor is ground and resurfaced using a fixed diamond abrasive and water. These abrasives are similar to sandpaper but differ in that there is no grit removed or left behind on the floor. The diamond abrasive is fixed to a pad. There are no chemicals used at all.

The water used will be recycled and reused in a specially designed system developed by Boylan Marble & Terrazzo Restoration Ltd..

To polish the stone or terrazzo super fine abrasives are used. These abrasives contain no harmful chemicals.

To maintain the stone or terrazzo surface, Boylan Marble & Terrazzo Restoration Ltd. uses approved Green cleaners which are complete safe.

Many stone restoration and janitorial companies are also using floor finishes to achieve a high luster on the stone or terrazzo surface. In addition to these finishes containing chemicals that are harmful to the environment, they also have a negative impact on the esthetics of the surface in the following ways:

- Most finishes used on stone and terrazzo are soft and tends to show wear and scuff marks in a very short time. This increase the amount of maintenance as well as cost for daily maintenance

- All floor finishes at some point will need to be stripped off. The chemical strippers used are caustic and can cause damage to the stone or terrazzo, not to mention the environmental impact.

- The old finish once it is removed will need to be disposed of. Most of these waste finishes are considered a hazardous waste.

- Most finishes do the opposite of what they are designed to accomplish. That is they become a dirt magnet. Boylan Marble & Terrazzo Restoration Ltd. has conducted experiments that show a coated surface will attract more dirt than a surface restored using our green system.

Our stone and terrazzo restoration process have no negative impact on the building environment or the occupants since we use no chemicals or finishes. The maintenance

requirement after the stone or terrazzo is restored is reduced by as much as 50% or more saving on labor and chemicals.

Boylan Marble & Terrazzo Restoration Ltd. understands the importance of sustainability and is constantly exploring, educating and developing processes to meet or exceed building sustainability.